## CLAIMS

- An anti-adhesion membrane comprising a biodegradable film having a honeycomb structure.
- 2. The anti-adhesion membrane according to claim 1, which is characterized in that the honeycomb structure has a mean void inner diameter of not more than 20  $\mu m$ .
- 3. The anti-adhesion membrane according to claim 1 or 2, which is characterized in that only one surface of the film has the honeycomb structure.
- 4. A biodegradable film having a honeycomb structure and comprising a biodegradable polymer and a surfactant, which is characterized in that said surfactant is a phospholipid.
- 5. The biodegradable film having a honeycomb structure according to claim 4, wherein said biodegradable polymer is a biodegradable aliphatic polyester and/or a biodegradable aliphatic polycarbonate.
- 6. The biodegradable film having a honeycomb structure according to claim 5, wherein said biodegradable aliphatic polyester is at least one polymer selected from the group consisting of biodegradable aliphatic polyesters including polylactic acid, a polylactic acid-polyglycolic acid copolymer, polyhydroxybutyric acid, polycaprolactone, polyethylene adipate, and polybutylene adipate.
- 7. The biodegradable film having a honeycomb structure

according to claim 5, wherein said biodegradable aliphatic polycarbonate is at least one polymer selected from the group consisting of polybutylene carbonate and polyethylene carbonate.

- 8. The biodegradable film having a honeycomb structure according to any one of claims 4 to 6, which is characterized in that said biodegradable polymer is polylactic acid or a lactic acid-glycolic acid coplymer.
- 9. The biodegradable film having a honeycomb structure according to claim 4 or 5, wherein said phospholipid is selected from the group consisting of phosphatidyl ethanolamine, phosphatidyl chorine, phosphatidyl serine, phosphatidyl glycerol, and derivatives thereof.
- 10. The biodegradable film having a honeycomb structure according to any one of claims 4 to 9, which is characterized in that said phospholipid is  $L-\alpha$ -phosphatidyl ethanolamine.
- 11. The biodegradable film having a honeycomb structure according to claim 10, which is characterized in that said phospholipid is  $L-\alpha$ -phosphatidyl ethanolamine dioleoyl.
- 12. The biodegradable film having a honeycomb structure according to claim 4, which is characterized in that a composition ratio of said biodegradable polymer to said phospholipid is from 1/1 to 1,000/1.
- 13. An anti-adhesion membrane comprising the biodegradable film according to claim 4 or 5.

14. A production process of the anti-adhesion membrane according to claim 1 or 13, which is characterized by using a biodegradable polymer film having a honeycomb structure as obtained by casting an organic solvent solution of a biodegradable polymer on a substrate in the atmosphere of a relative humidity of from 50 to 95 %, gradually transpiring said organic solvent and simultaneously condensing it on the surface of said cast liquid, and evaporating fine water droplets as generated by said condensation.